

Remarks

In this discussion set forth below, Applicant does not acquiesce to any rejection or averment in the instant Office Action unless Applicant expressly indicates otherwise.

The non-final Office Action dated April 24, 2008, lists the following matters: claims 4-5 stand objected to regarding an informality; and claims 1-7 stand rejected under 35 U.S.C. § 103(a) over Schmoock *et al.* (US 6,624,994) in view of Valley (U.S. 4,743,779) and Applicant's Figure 1. Reconsideration and allowance of the claims is requested in light of the arguments presented below.

Regarding the objection to claims 4-5, Applicant has amended the preamble of these claims in the manner suggested by the Office Action. Thus, Applicant requests that the objection to claims 4-5 be removed. Applicant notes that other minor amendments have been made to various claims to improve readability. These amendments are not being made to overcome any of the rejections raised by the Office Action, which fail for at least the reasons discussed below.

Applicant respectfully traverses the § 103(a) rejection of claims 1-7 because the modification of the Schmoock reference in view of the Valley reference proposed by the Office Action undermines a stated purpose of Schmoock. According to M.P.E.P. § 2143.01, “If (a) proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *See also In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984). In this instance the Office Action asserts that Schmoock discloses a feedback circuit (*i.e.*, elements V_{ref}, 44 and 48 of Figure 2); however, the Office Action acknowledges that Schmoock does not teach that this “feedback circuit” increases the voltage across the main cell controlled outputs if the magnitude of the voltage across these outputs falls below a predetermined value as does that feedback circuit of the claimed invention. The Office Action then appears to propose modifying Schmoock’s feedback circuit such that it increases the voltage across the main cell controlled outputs. Applicant submits that such a modification would render Schmoock unsatisfactory for its stated purpose of providing an over-current protection scheme that protects switch transistor 32. *See, e.g.*, Figure 2 and Col. 5:8-11. Specifically, Schmoock’s comparator 44 compares the voltage drop across switch transistor 32 to reference voltage Vref such

that when the current flowing through the transistor 32 exceeds a predetermined value, the comparator 44 causes the gate of the transistor 32 to be pulled to ground thereby turning off the transistor 32 (*i.e.*, decreasing the voltage). *See, e.g.*, Figure 2 and Col. 5:25-53. The Office Action’s proposed modification would alter Schmoock’s feedback circuit such that it would increase the voltage on the gate of transistor 32, instead of decreasing the voltage as required by Schmoock to provide over-current protection. Applicant submits that Schmoock’s feedback circuit would no longer provide over-current protection, thus rendering Schmoock unsatisfactory for its stated purpose. As such, there is no motivation for the skilled artisan to modify the Schmoock reference in the manner proposed by the Office Action. Accordingly, the § 103(a) rejection of claims 1-7 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1-7 because the modification of the Schmoock reference in view of Applicant’s Figure 1 proposed by the Office Action undermines a stated purpose of Schmoock. *See, e.g.*, M.P.E.P. § 2143.01 discussed above. The Office Action asserts that Schmoock discloses a comparator (*i.e.*, element 40 of Figure 2) that compares the voltage of the source of transistor 32 to the voltage of the source of transistor 52; however, the Office Action acknowledges that Schmoock does not teach that this “comparator” outputs a low-current signal when the magnitude of the voltage across the main cell outputs falls below that across the sense cell outputs as in the claimed invention. The Office Action then appears to propose modifying Schmoock’s operational amplifier 40 such that it outputs a low-current signal. Applicant submits that such a modification would render Schmoock unsatisfactory for its stated purpose of providing an over-current protection scheme that protects switch transistor 32. *See, e.g.*, Figure 2 and Col. 5:8-11. Specifically, Schmoock’s operational amplifier 40 adjusts its output signal in relation to the differential signal at its inputs in order to cause the source voltages of transistors 32 and 52 to be relatively equal, thereby providing over-current protection. *See, e.g.*, Figure 2 and Col. 6:35-50. The Office Action’s proposed modification would alter Schmoock’s operational amplifier 40 such that it would output a low-current signal, instead of adjusting its output signal to control the source voltages of the transistors 32 and 52 as required by Schmoock to provide over-current protection. Applicant submits that Schmoock’s operational amplifier 40 would

no longer provide over-current protection, thus rendering Schmoock unsatisfactory for its stated purpose. As such, there is no motivation for the skilled artisan to modify the Schmoock reference in the manner proposed by the Office Action. Accordingly, the § 103(a) rejection of claims 1-7 is improper and Applicant requests that it be withdrawn.

Applicant notes that while the Office Action has identified the elements of the cited references, little explanation of how these elements are combined is provided. In order to comply with 35 U.S.C. § 132, sufficient detail must be provided by the Examiner regarding the alleged correspondence between the claimed invention and the cited reference to enable Applicant to adequately respond to the rejections. *See, also*, 37 CFR 1.104 (“The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.”) and M.P.E.P. § 706.02(j), (“It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.”) In an effort to facilitate prosecution, Applicant has assumed that the asserted combinations attempt to create a hypothetical embodiment as described above. Should the Office Action have envisioned some, as of yet unidentified, combination of the references, Applicant requests clarification, a showing of support and an opportunity to respond prior to a final rejection pursuant to M.P.E.P. § 706.07 (“The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal.”).

Applicant further traverses the § 103(a) rejection of claims 1-7 because the cited combination does not correspond to the claimed invention which includes, for example, aspects directed to comparing the voltages across the main cell controlled outputs and the sense cell controlled outputs and outputting a low-current signal when the magnitude of the voltage across the main cell controlled outputs falls below that across the sense cell controlled outputs. The Office Action acknowledges that Schmoock and Valley fail to disclose a comparator that outputs a low-current signal as in the claimed invention. The Office Action then cited to the comparator 18 of Applicant’s Figure 1 (admitted prior art); however, the comparator 18 does not compare the voltages across main cell outputs and sense cell outputs because Figure 1 does not have main cell outputs and sense cell outputs. *See, e.g.*, Applicant’s Figure 1. As such, the Office Action fails to cite to any

reference that teaches or suggests a comparator that compares the voltages across the main cell controlled outputs and the sense cell controlled outputs and that outputs a low-current signal as in the claimed invention. Applicant submits that the Office Action has simply identified elements and appears to be arranging these elements in the manner taught by Applicant's disclosure, which is a hallmark of improper hindsight reconstruction. *See, e.g.*, M.P.E.P. § 2142. Accordingly, the § 103(a) rejection of claims 1-7 is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

Please direct all correspondence to:

Corporate Patent Counsel
NXP Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131

CUSTOMER NO. 65913

By:



Name: Robert J. Crawford
Reg. No.: 32,122
651-686-6633
(NXPS.539PA)